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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/542,820	12/20/2005	Philippe Halbin	17170/012001	8937
22511	7590	05/26/2009		
OSHA LIANG L.L.P. TWO HOUSTON CENTER 909 FANNIN, SUITE 3500 HOUSTON, TX 77010			EXAMINER KRAUSE, JUSTIN MITCHELL	
			ART UNIT 3656	PAPER NUMBER
			NOTIFICATION DATE 05/26/2009	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/542,820

Applicant(s)

HALBIN ET AL.

Examiner

JUSTIN KRAUSE

Art Unit

3656

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 April 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 11 and 12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 11 and 12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 July 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF-08)
- Paper No(s)/Mail Date 7/20/05
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of invention 1 in the reply filed on April 9, 2009 is acknowledged.

Claims 1-4 and 11-12 are currently pending. Non-elected claims 4-10 have been cancelled by applicant.

Information Disclosure Statement

The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "27" has been used to designate both "shaft segment" and protrusion (see spec. page 12).

Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g).

Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s)

should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-3 and 11-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites, "a second front stop" without reciting a "first" front stop. It is unclear if the device has a first front stop or not. If the device does not have two front stops, then the claim should recite --a first front stop-- or simply --a front stop--. Similarly, if there is not more than one rear stop, the claim may recite --a rear stop--.

Claim 11 is unclear because the scope of, "a diameter acceptable by the retaining ring" cannot be determined. What is considered "acceptable" is indefinite.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented

and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Prior Art Figure 1 in view of Rafer (FR 2 649 349).

Prior Art Figure 1 discloses a rotating electric starter shaft of an electric starter drive assembly that includes a self-disengaging coupling device (12) acting between a bushing (18) and a pinion (11), the bushing and the shaft having splines (15, 16) that cooperate, the shaft having a first rear stop (stop comprises retaining ring 21) and a second front stop (22) spaced apart thereon to define a course along which the starter drive assembly slides between a rest and a working position, said first rear stop being formed by an elastic retaining ring (21) inserted into an annular positioning groove (see fig. 1, aligned with arrow F) of the shaft.

Prior Art Figure 1 does not disclose a method of mounting the retaining ring.

Rafer teaches mounting a retaining ring (1) on an axial segment of the shaft in an accessible mounting area; and moving an assembly axially toward so as to move the retaining ring along the axial segment of the shaft to the positioning groove (3¹), which is located in a service area (d3) with no radial access (see for example, figure 1) for the purpose of permitting the insertion of a retaining ring within a corresponding groove (abstract) and also for the purpose of easing the installation of large or stiff retaining rings.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Prior Art Figure 1 and mount the retaining ring by

mounting the retaining ring on an accessible mounting area and moving the assembly so as to move the retaining ring along the axial segment of the shaft to the positioning groove for the purpose of permitting insertion of a retaining ring within a corresponding groove, and easing the installation of large or stiff retaining rings as taught by Rafer.

Regarding claim 2, Prior Art Figure 1 discloses the service area (considered the area where the positioning groove is located) is disposed beneath a protrusion (13b) of a speed reducer.

Regarding claim 3, Rafer discloses the same method of mounting a retaining ring may be used to mount retaining rings internally (as in figure 1) or externally (as in figure 4). Rafer discloses in figure 4 a shaft segment with a cross section that increases towards the positioning groove is used.

Regarding claim 11, as best understood, a diameter of the shaft is close or equal to a diameter acceptable by the retaining ring without elastic deformation of the retaining ring. (As best as the limitation is understood, the limitation is interpreted to mean that the retaining ring is not bent or deformed to the point where it no longer is able to spring back into the retaining groove. Since the retaining ring is mounted in the groove by the method, the limitation is considered satisfied.)

Regarding claim 12, Prior Art Figure 1 discloses a plurality of protrusions (26), wherein at least one of the protrusions is shorter than other protrusions (see figure 1, the protrusion at the bottom of the figure is shorter than the protrusion 13b at the top of the figure).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JUSTIN KRAUSE whose telephone number is (571)272-3012. The examiner can normally be reached on Monday - Friday, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on 571-272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Justin Krause/
Examiner, Art Unit 3656

/Richard WL Ridley/

Supervisory Patent Examiner, Art Unit 3656

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